

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 December 2000 (07.12.2000)

PCT

(10) International Publication Number
WO 00/73575 A1

(51) International Patent Classification⁷: **D21C 7/08**,
9/00, 9/02

(21) International Application Number: **PCT/FI00/00459**

(22) International Filing Date: **22 May 2000 (22.05.2000)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
991220 **28 May 1999 (28.05.1999)** **FI**

(71) Applicant (for all designated States except US): **VALMET
CHEMICAL PULPING OY [FI/FI]; P.O. Box 34, FIN-
28101 Pori (FI).**

(72) Inventor; and

(75) Inventor/Applicant (for US only): **SVEDMAN, Mikael
[FI/FI]; Itsenäisyydenkatu 66 as 4, FIN-28100 Pori (FI).**

(74) Agent: **OY JALO ANT-WUORINEN AB; Iso
Roobertinkatu 4-6 A, FIN-00120 Helsinki (FI).**

(81) Designated States (*national*): AE, AG, AL, AM, AT, AT
(utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH,
CN, CR, CU, CZ, CZ (utility model), DE, DE (utility
model), DK, DK (utility model), DM, DZ, EE, EE (utility
model), ES, FI, FI (utility model), GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US,
UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- Before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments.

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **METHOD FOR AVOIDING MECHANICAL DAMAGE OF PULP**

(57) Abstract: A method for producing chemical pulp from cellulosic material by means of alkaline cooking, including cooking the material to pulp at cooking temperature in a digester, reducing the temperature at the end of the cook, substantially relieving the overpressure in the digester and then discharging the pulp from the digester by means of pumping. The method is characterized in that the pulp is cooled to essentially 85 °C to 70 °C before pumping cooked material as a fluid suspension from the digester, and that the temperature of the cooked material is maintained in the same temperature range and at a pH level being between 10 and 13, between the digester and a first delignification/bleaching stage, thus avoiding mechanical damage of cellulosic material.

WO 00/73575 A1

209220" 82592660